

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ALFRED ADAMSKI
and BRIAN T. DOEPKER

Appeal No. 1997-1314
Application 08/300,684

ON BRIEF

Before KRASS, BARRETT and HECKER, Administrative Patent
Judges.

HECKER, Administrative Patent Judge.

DECISION ON APPEAL

Appeal No. 1997-1314
Application No. 08/300,684

This is a decision on appeal from the final rejection of claims 1, 3 through 7, and 9 through 12, all of the claims pending in this application.¹

The invention relates to a cathode ray tube (CRT) for color television, and more particularly to the bimetal springs which support the aperture mask-frame assembly in the face panel portion of the glass envelope of the CRT.

Representative independent claim 1 is reproduced as follows:

1. A support spring for an aperture mask-frame assembly in a cathode ray tube, the spring being an elongate member of flat spring material comprising a base portion, a body portion and an apertured portion, the base portion lying in a first plane and the body and apertured portions lying in a second plane, the first and second planes intersecting to form an angle, characterized in that two raised spaced apart ribs of spring material extend longitudinally along at least a portion of the body portion of the spring.

The references relied on by the Examiner are as follows:

Fukuzawa et al. (Fukuzawa)	4,335,329	Jun. 15,
1982		

¹ We note the Examiner correctly indicates that claims 9-11 depend from claim 7, not claim 8.

Appeal No. 1997-1314
Application No. 08/300,684

Admitted Prior Art (APA)

Claims 7 and 10 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Fukuzawa.

Claims 1, 3 through 6, 9, 11 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over APA in view of Fukuzawa.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the brief and the answer for the details thereof.

OPINION

After a careful review of the evidence before us, we agree with the Examiner that claims 7 and 10 are anticipated under 35 U.S.C. § 102(b) by Fukuzawa. We also agree with the Examiner that claims 1, 4 through 6, 11 and 12 are properly rejected under 35 U.S.C. § 103. Thus, we will sustain the rejection of these claims but we will reverse the rejection of the remaining claims on appeal (claims 3 and 9) for the reasons set forth *infra*.

Appeal No. 1997-1314
Application No. 08/300,684

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. **See *In re King***, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and ***Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.***, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984). "Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention." ***RCA Corp. v. Applied Digital Data Systems, Inc.***, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984), *cert. dismissed*, 468 U.S. 1228 (1984), *citing Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983).

With respect to claims 7 and 10, the Examiner states that Fukuzawa discloses the claimed support spring for a cathode ray tube as shown in Figure 9. In Figure 9, element 30 is considered the base portion of the spring and elements 31e are considered the two raised ribs. (Answer-page 3.) We also note that 31d depicts the body portion while 31c represents the aperture portion.

Appeal No. 1997-1314
Application No. 08/300,684

Appellants argue that Fukuzawa's element 31 is a metallic support member, thus rib members 31e are not present on the body portion of the spring but on a support member (answer-page 6). We note that element 31 contains several "portions". As noted supra, 31d depicts the body portion, and it is clearly

illustrated in Figure 9 that rib members 31e are "present" thereon.

Appellants argue that even if rib members 31e are viewed as being on body portion 31d, the rib members 31e are also on the apertured portion, which is not provided in the claims (answer-page 6). We agree, ribs are not provided in the claims for the apertured portion. However, this is not fatal to the Examiner's rejection since ribs are also not excluded from being on the apertured portion by the claims.

Appellants further argue that ribs 31e of Fukuzawa are not present on the surface of the body portion 31d, but are only edges thereof (answer-page 6). We find no such distinction recited in claim 7. Claim 7 recites "...support

Appeal No. 1997-1314
Application No. 08/300,684

spring **has** two spaced apart raised ribs extending longitudinally along at least part of the body portion."
(Emphasis added.)

Thus we find that Fukuzawa clearly teaches everything recited in claim 7. As to claim 10, which requires that the ribs be "located near opposite longitudinal edges of the spring," we find this is clearly shown in Fukuzawa's Figure 9. Accordingly, we will sustain the Examiner's 35 U.S.C. § 102(b) rejection of claims 7 and 10.

It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the reasonable teachings or suggestions found in the prior art, or by a reasonable inference to the artisan contained in such teachings or suggestions. *In re Sernaker*, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983).

Obviousness is a question of law based on findings of underlying facts relating to the prior art, the skill of the

Appeal No. 1997-1314
Application No. 08/300,684

artisan, and objective considerations. The teachings of the references, their relatedness to the field of the applicant's endeavor, and the knowledge of persons of ordinary skill in the field of the invention, are all relevant considerations. **See *In re Oetiker***, 977 F.2d at 1447, 24 USPQ2d at 1445-46; ***In re Gorman***, 933 F.2d at 986-87, 18 USPQ2d at 1888; ***In re young***, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991).

With respect to claims 1 and 4, Appellants argue:

In addition, the device in Fig. 9, which Examiner considers to be the support spring, does not have the apertured portion 31c and the portion 31d (which Examiner considers to be the body portion) to be present in a single plane as required by the instant claims. (Answer-page 7.)

Although claim 1 does not recite "a single plane", we assume Appellants are referring to the following language of claim 1:

the base portion lying in a first plane and the body and apertured portions lying in a second plane, the first and second planes intersecting to form an angle...

Looking at Fukuzawa's Figure 9 we see base portion

Appeal No. 1997-1314
Application No. 08/300,684

30 lying in a plane, which as depicted, appears to be coincident with the plane of the paper it appears on. With this perspective in mind, we view elements 31c (apertured portion) and 31d (body portion) as lying in one plane which is perpendicular to the paper, and running vertically from top to bottom of the paper. In other words, the left rib 31e, although bent in an L shape, lies in one plane, the same one plane as described for 31c and 31d lying therein. Note that rib 31e is attached to both apertured portion 31c and body portion 31d. Thus, we find Fukuzawa meets the language of claims 1 and 4 and we will sustain the 35 U.S.C. § 103 rejection of these claims. We note that APA is considered as merely cumulative. Lack of novelty is the ultimate of obviousness. See *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982).

With respect to claims 3 and 9, Appellants argue that the references do not teach or suggest the ribs extending partially into the base portion of the spring. (Brief-page

Appeal No. 1997-1314
Application No. 08/300,684

7.)

The Examiner responds:

Fukuzawa et al was relied upon for its teaching of using two raised ribs extending longitudinally along two planar portions for the purpose of imparting rigidity. In view of Fukuzawa et al's teaching, the combination as explained in the rejection above would lead the ribs (i.e. when placed on applicant's prior art spring of Fig. 4) to extend partially into the base portion of the spring as per claims 3 and 9. (Answer-page 7.)

We do not agree with the Examiner. The two planar portions of Fukuzawa are the aperture and body portions, not the base portion claimed by Appellants. APA does not teach or suggest extending the ribs into the base portion. We see no way to meet this claim limitation other than Appellants' own teaching. The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." **In re Fritch**, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), **citing In re Gordon**, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings

Appeal No. 1997-1314
Application No. 08/300,684

or suggestions of the inventor." *Para-Ordnance Mfg. v. SGS Importers Int'l*, 73 F.3d at 1087, 37 USPQ2d at 1239, *citing W. L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-13.

Thus, we will not sustain the 35 U.S.C. § 103 rejection of claims 3 and 9.

Looking at claims 5, 6, 11 and 12, which recite specific dimensions for the ribs, such as a width of about 0.15 inches and a height of about 0.025 inches, Appellants argue the references provide no such dimensions, and that those claimed "provides particularly good results." (Brief-page 8.)

The Examiner's position is that the sizes recited are not patentably significant since the Appellants' disclosure fails to show such limitations solve any stated problem or yield any unobvious advantage, and are a matter of design alternatives. (Answer-pages 4 and 5.)

A claimed limitation is an obvious design choice where such limitation presents no new or unexpected result and solves no stated problem and would be an obvious matter of

Appeal No. 1997-1314
Application No. 08/300,684

design choice within the skill of the art. *In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975). Determining the optimal values of result effective variables would have been obvious and ordinarily within the skill of the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Fukuzawa teaches the use of ribs to "impart rigidity to the metallic support member" (column 5, lines 45 and 46), just as Appellants employ "strengthening ribs" (specification, page 7, line 12). Since Fukuzawa supplies no indication as to the dimensions of the ribs, one of ordinary skill in the art would necessarily explore various design alternatives, as did Appellants (Appellants' graphs in Figures 6 and 7). Thus, we find the dimensions recited in claims 5, 6, 11 and 12 to be obvious over the teachings of Fukuzawa, and are derived from the optimization of result effective variables. Accordingly, we will sustain the Examiner's 35 U.S.C. § 103 rejection of claims 5, 6, 11 and 12.

In view of the foregoing, the decision of the Examiner rejecting claims 7 and 10 under 35 U.S.C. § 102(b) and claims 1, 4 through 6, 11, and 12 under 35 U.S.C. § 103 is

Appeal No. 1997-1314
Application No. 08/300,684

affirmed; however, the decision of the Examiner rejecting
claims 3 and 9 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED-IN-PART

Errol A. Krass)
Administrative Patent Judge)
)
)
) BOARD OF
PATENT)
) APPEALS
Lee E. Barrett)
AND Administrative Patent Judge)
)
) INTERFERENCES
)
Stuart N. Hecker)
Administrative Patent Judge)

Appeal No. 1997-1314
Application No. 08/300,684

SH/dm

Corporate Patent Counsel
US Philips Corporation
580 White Plain Road
Tarrytown NY 10591